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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,367

07/25/2008

John Wentworth Bucknell

FISHER-K

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05/20/2011

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

05/20/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,367	<b>Applicant(s)</b> BUCKNELL, JOHN WENTWORTH	
	<b>Examiner</b> MICHAEL P. FERGUSON	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 10-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7-9,16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Species 1, Figures 1 and 2, claims 1-4, 7-9, 16 and 17, in the reply filed on December 17, 2010 is acknowledged.
2. Claims 5, 6 and 10-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 17, 2010.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites "in which the connector element is a bolt or a stud". Claim 1 (lines 1-2), from which claim 2 depends, recites "An hydraulically assisted fastener comprising: a body with a central bore to engage a connector element". It is unclear as to whether the connector element has been positively claimed as an element of the claimed invention within claim 2, or whether such connector element has only been recited as intended use. Accordingly, one is unable to properly determine the metes and bounds of such claim. Claim 3 depends from claim 2 and is likewise rejected as being indefinite.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

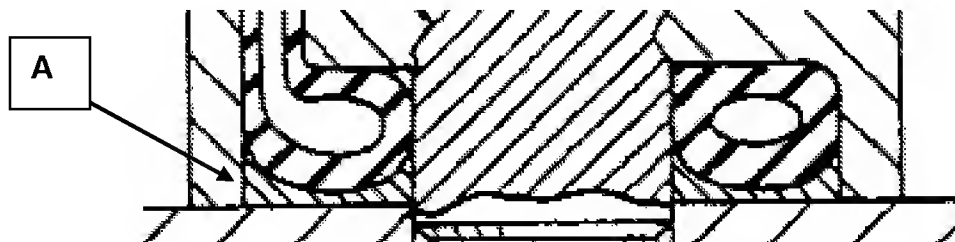
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipate by Bucknell (US 5,730,569).

As to claim 1, Bucknell discloses an hydraulically assisted fastener comprising:  
a body **11** with a central bore **18** to engage a connector element **B** and with an annular recess **15** opening outwards to an end surface;

an annular thrust member **12** which fits into and seals the annular recess (thrust member **12** seals around circumferential surface **A** of recess **15**; Figure 18 reprinted below with annotations);

an annular chamber defined by the recess and the thrust member; and  
a charging medium which is injected into the chamber **13** under pressure and which moves the body relative to the thrust member to tension the connector element and which sets in the chamber to maintain the tension in the connector element (Figures 1-4B,18).



As to claim 2, Bucknell discloses a fastener in which the connector element **B** is a bolt or a stud (Figure 18).

As to claim 3, Bucknell discloses a fastener in which the body **11** is a nut which screws onto the bolt **B** or stud and the thrust member **12** is a washer with a plain bore (Figure 18).

As to claim 4, Bucknell discloses a fastener in which the recess **15** extends inwards to the bore **18** and the chamber is defined by the recess, the thrust member and the connector element **B** (Figure 18).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7, 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bucknell in view of Bunyan (US 3,462,180).

As to claims 7 and 8, Bucknell discloses a fastener in which the charging medium is a viscous fluid, instead of a viscous paste which cures to become solid comprising suspended solids in a self setting compound or particulate solids which behave as fluid media, or in which the charging medium is a solid injectable media, wherein the solid injectable media comprises graphite.

Bunyan teaches a fastener wherein a charging medium is a viscous paste which cures to become solid comprising suspended solids in a self setting compound or

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particulate solids which behave as fluid media, a solid injectable media comprising graphite, or a viscous fluid; viscous paste, solids and viscous fluids each providing a means for applying fluid pressure to a trust member (Figure 3; column 1 lines 54-69, column 2 lines 35-57). Inasmuch as the references disclose viscous pastes, solid injectable media and viscous fluids as art recognized functional equivalents for applying fluid pressure to a trust member, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

9. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bucknell in view of Imai et al. (US 7,008,156).

As to claim 9, Bucknell discloses a fastener wherein the charging medium is viscous fluid, instead of a particulate solid of a granular nature, wherein the particulate solid includes one of lead, copper or steel balls.

Imai et al. teach a fastener wherein a charging medium is a particulate solid of a granular nature comprising steel balls **B1**, or a viscous fluid; granular particulate solids and viscous fluids both providing a means for applying fluid pressure to a trust member (Figure 2; column 9 lines 30-34). Inasmuch as the references disclose granular particulate solids and viscous fluids as art recognized functional equivalents for applying fluid pressure to a trust member, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

### ***Response to Arguments***

10. Applicant's arguments filed April 29, 2011 have been fully considered but they are not persuasive.

Attorney argues that:

Bucknell does not disclose an hydraulically assisted fastener comprising an annular thrust member which fits into *and seals the annular recess* of the body; and an annular chamber defined by the recess and the thrust member, *since the charging medium is contained within a bladder within the Bucknell reference..*

Examiner disagrees. As to claim As to claim 1, Bucknell discloses an hydraulically assisted fastener comprising an annular thrust member **12** which fits into and seals the annular recess **15** of the body **11** (thrust member **12** seals around circumferential surface **A** of recess **15**; Figure 19); and an annular chamber defined by the recess and the thrust member (Figures 1-4B,18).

Examiner notes that claim 1 fails to recite any limitations which clearly and positively claim direct engagement between the charging medium with the thrust member and the walls defining the recess, nor recites any limitations which preclude the charging medium from being contained with a bladder.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL P. FERGUSON whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF  
05/18/11

/Michael P. Ferguson/  
Primary Examiner, Art Unit 3679